

REMARKS

Claims 1-3, 5-9 and 11-22 are pending.

In paragraph No. 1 of the Action, the Examiner acknowledges the cancellation of Claims 3 [sic, 4] and 10 and withdraws the objections that were directed towards them.

Applicants respectfully submit that the reference to cancellation of claim 3, rather than claim 4, appears to be a typographic error, since the Examiner refers to Claim 3 in the rest of the Action.

In paragraph No. 3 of the Action, Claim 13 has been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bolle et al (US 6,217,942).

Applicants submit that this rejection should be withdrawn because Bolle et al do not disclose or render obvious the presently claimed process for producing an oral care product, a sanitary product, a pet product, a food or a feed.

The Examiner states that intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art.

Applicants respectfully submit that the present Claim 13 is a process claim, not a product claim reciting intended use. Bolle et al do not disclose or suggest a process “for producing an oral care product, a sanitary product, a pet product, a food or a feed, which comprises mixing a lignin, a phenolic compound-oxidizing enzyme, and a carrier acceptable for the oral care product, the sanitary product, the pet product, the food or the feed” as recited in the present Claim 13.

In view of the above, reconsideration and withdrawal of the § 103(a) rejection of Claim 13 based on Bolle et al '942 are respectfully requested.

In paragraph No. 4 of the Action, Claims 1-3, 5-9 and 11-22 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Echigo et al (US 6,537,546) in view of Yamashita et al (US 6,780,403).

Applicants submit that this rejection should be withdrawn because Echigo et al or Yamashita et al do not disclose or render obvious the presently claimed invention, either alone or in combination.

Applicants submit that Echigo et al disclose a process of increasing the molecular weight of phenolic compounds by allowing a polyphenol-oxidizing enzyme to act on phenolic compounds (such as lignin) to macromolecularize them, so that the phenolic compounds having increased molecular weight can be used as a deodorant. See, col. 3, lines 10-15 and 54, and abstract. In other words, a polymerized lignin, not a composition of polyphenol-oxidizing enzyme and lignin, forms the deodorant of Echigo et al.

The enzyme of Echigo et al is used for polymerizing phenolic compounds, e.g. lignin, whereas the enzyme of Claims 1 and 11-14 is used for converting phenolic hydroxyl groups into the corresponding quinone groups (see, page 19, lines 14-18 of the specification). The use referred to in Claims 1 and 11-14 implies a particular form of the substance.

Further, synergistic effects of the combined use of lignin and a phenolic-compound oxidizing enzyme are apparent from Examples 1 to 38 in the specification. Furthermore, the presently claimed deodorant composition has an effect of removing the bad odor emitted by lower fatty acids such as butyric acid and isobutyric acid (see, page 4, lines 5-9 of the specification), compared with the known compositions (ibid, page 3, lines 8-12 of the specification). Moreover, the presently claimed deodorant composition has an additional effect of

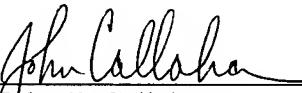
giving off little or no foul odor derived from the substrate (see, page 8, lines 1 to 8 of the specification). Those unexpected results are not taught or suggested by Echigo et al.

In view of the above, reconsideration and withdrawal of the § 103(a) rejection of Claims 1-3, 5-9 and 11-22 based on Echigo et al '546 in view of Yamashita et al '403 are respectfully requested.

Allowance is respectfully requested. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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